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10/590,430

06/18/2007

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EXAMINER

LEVINE, JOSHUA H

ART UNIT

PAPER NUMBER

3774

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/590,430 | <b>Applicant(s)</b><br>OBREBSKI, ANDREAS |  |
|                              | <b>Examiner</b><br>JOSHUA LEVINE     | <b>Art Unit</b><br>3774                  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-15 and 18-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-15 and 18-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 June 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/4/2011</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This office action is responsive to the amendment filed on 04/04/2011. As directed by the amendment: claims 12, 19, 24 and 31-32 have been amended, claims 6 and 16 have been cancelled, and no new claims have been added. Thus, claims 1-5 and 7-15 and 17-35 are presently pending in this application.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1 and 35 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 8-11, 13-15, 17, 20-22, 24, 26-35 are rejected under 35 U.S.C. 102(a) as being anticipated by Esch (WO 2004/054471).

5. Regarding claims 1, 8, 20, 21, 26, 27, 30, 33-35, Esch disclosed an artificial lens for an eye 40 (IOL, figure 4B), which is characterized in that it has two or more media (e.g. silicon and a fluid with a different index of refraction, P51) that are flexible in shape that come into direct contact with one another as lens elements, in that the media that are flexible in shape contact on at least one interface (via flexible layer 42, figure 4B) and are disposed so that they can be displaced relative to one another, and in that the media that are flexible in shape are each formed as a liquid (fluid, P51).

6. Regarding claims 2 and 7, Esch disclosed in that the at least two media that are flexible in shape are disposed in an uptake container forming a lens body (e.g. relief chambers 50 and 56, figure 4A).

7. Regarding claim 3, Esch disclosed further characterized in that the latter is formed in a suitable manner for accommodation (accommodating IOL, P49).

8. Regarding claim 4, Esch disclosed further characterized in that it has a defined, pre-adjusted refractive power (inherently has a refractive power).

9. Regarding claim 5, Esch disclosed further characterized in that it has a defined dynamic range of refractive power, and that the dynamic range comprises at least 1.5 diopters (at least 1-2 diopters, P10).

10. Regarding claim 10, Esch disclosed further characterized in that the media that are flexible in shape cannot be mixed (separated by flexible layer 42).

11. Regarding claim 11, Esch disclosed further characterized in that at least one boundary of the uptake container has at least one arched contour, at least in regions (as shown in figures 4A-4B).

12. Regarding claim 12-14, Esch disclosed further characterized in that at least one boundary of the uptake container is flexible and made transparent, at least in regions (flexible transparent layer, P41).

13. Regarding claim 15, Esch disclosed further characterized in that at least one medium that is flexible in shape is applied to at least one bearing surface, at least in regions (via fluids).

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14. Regarding claim 17, Esch disclosed further characterized in that at least one of the media that are flexible in shape is made in the form of one or more drops (fluid is able to be composed of drops).

15. Regarding claim 18, Esch disclosed that the media that are flexible in shape have the same or approximately the same density (transparent polymer and silicon is approximately the same density, P50).

16. Regarding claim 19, Esch disclosed further characterized in, that the media that are flexible in shape have the same or approximately the same density in a specific temperature range and that the temperature range may lie between 30 °C and 45 °C (transparent polymer and silicon have approximately the same density in the recited temperature range).

17. Regarding claim 22, Esch disclosed further characterized in that the means for changing the interface(s) can be disposed annularly around a clear opening (as shown in figure 4A-4B).

18. Regarding claim 23, Esch disclosed characterized in that the clear opening at least corresponds to the maximum pupil diameter of the eye for which the artificial lens is specified as shown in Figure 4A-4B).

19. Regarding claim 24, Esch disclosed characterized in that the means for changing at least one of the size and the shape of the interface(s) between the media that are flexible in shape are formed on the basis of electrowetting. This claim is considered a product by process claim and is evaluated on the structure of the final product. The prior art can be made via such a process.

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20. Regarding claim 28, Esch disclosed in that the means for changing the interface(s) are formed as a mechanical means (via ciliary muscles).

21. Regarding claim 29, Esch disclosed further characterized in that the mechanical means are formed as a piston device, a stamping device or a cylinder device (e.g. cylinder device, see figures 4A-4B).

22. Regarding claim 31, Esch disclosed characterized in that the fixation in space of the media that are flexible in shape inside the uptake container is provided by fastening means 46 (haptics, figure 4A) .

23. Regarding claim 32, Esch disclosed further characterized in that the fastening means are designed in the form of at least one of one or more different surface coating(s) inside the uptake container and a geometric configuration at least of regions of the uptake container (haptics compose a resilient elastic material, P50).

***Claim Rejections - 35 USC § 103***

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Esch (WO 2004/054471) in further view of Klopotek (USPN 6,730,123).

26. Regarding claim 25, Esch substantially disclosed all the elements of the claim except for a first medium that is flexible in shape and a second medium that is flexible in shape have a different electrical conductivity, that the medium that is flexible in shape

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and has the smaller electrical conductivity is disposed between the medium that is flexible in shape and has the greater electrical conductivity and at least one electrode, and that by applying an electrical field between the at least one electrode and the medium that is flexible in shape and has the greater electrical conductivity, the interface between the two media that are flexible in shape is changed or can be changed.

Klopotek teaches a first medium that is flexible in-shape and a second medium that is flexible in shape have a different electrical conductivity (ferro fluid and optical fluid), that the medium that is flexible in shape and has the smaller electrical conductivity is disposed between the medium that is flexible in shape and has the greater electrical conductivity and at least one electrode (nano-particles, column 4 line 4), and that by applying an electrical field between the at least one electrode and the medium that is flexible in shape and has the greater electrical conductivity, the interface between the two media that are flexible in shape is changed or can be changed. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the properties of Klopotek for the purposes of including a pump that can change focusing performance of an intraocular lens (c2:L3-14).

### ***Conclusion***

27. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 04/04/2011 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA LEVINE whose telephone number is (571)270-5413. The examiner can normally be reached on Monday-Thursday 7:30am-5:00pm ETA.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Isabella can be reached on 571-272-4749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. L./  
Examiner, Art Unit 3774

/DAVID ISABELLA/  
Supervisory Patent Examiner, Art  
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